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**In the Specification**

Please amend the paragraph beginning at page 46, line 28 to read as follows:

Fig. 3 shows an example as designs of templates for the generation of a library. In panel A, coding regions 1-6 are SEQ ID NOs:29-34, respectively. In panel B, codon 1 is SEQ ID NO:35, anti-codon 1 is SEQ ID NO:36, codon 6 is SEQ ID NO:37, and anti-codon 6 is SEQ ID NO:38.

Please amend the paragraph beginning at page 48, lines 29-30 to read as follows:

Fig. 22 shows a schematic representation (panel A) of the zipper box principle and an example (panel B) of two building blocks. In panel B, the first sequence is SEQ ID NO:4, and the second is bases 2-55 of SEQ ID NO:6.

Please delete the paragraphs at page 79, lines 17-22 and add the following new paragraphs:

AH 316: 5'- 6GTAACAGACCTGTCGAGCATCCAGCT (SEQ ID NO:1)  
AH 331: 5'-  
CGACCTCTGGATTGCATCGGTGTTACX (SEQ ID NO:2)  
AH140: 5'-  
AGCTGGATGCTCGACAGGTCAGGTCGATCCGCGTTACCAGTCTTGCCTGAACGTAGTCGTCCGAT  
GCAATCCAGAGGTCG (SEQ ID NO:3)

Please delete the paragraphs at page 80, line 21 to page 81, line 17 and add the following new paragraphs:

AH36: 5'-  
CGACCTCTGGATTGCATCGGTCATGGCTGACTGTCCGTCGAATGTGTCCAGTTACX (SEQ ID NO:4)

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AH38: 5'- AGCTGGATGCTCGACAGGTCCCGATGCAATCCAGAGGTCG (SEQ ID NO:5)

AH51: 5'-

ZGTAACACCTGTGTAAGCTGCCTGTCAGTCGGTACTGACCTGTCGAGCATCCAGCT (SEQ ID NO:6)

AH137: 5'-ACGACTACGTTTCAGGCAAGA (SEQ ID NO:7)

AH138: 5'-

TCTTGCCTGAACGTAGTCGTAGGTTCGATCCGCGTTACCAGAGCTGGATGCTCGACAGGTCCC  
GATGCAATCCAGAGGTCG (SEQ ID NO:8)

AH139: 5'-CGACCTCTGGATTGCATCGG (SEQ ID NO:9)

AH143: 5'-

CTGGTAACGCGGATCGACCTTCATTTTTTTTTTTTTTTTTTTTTTTGGCTGACTGTCCGTCGAA  
TGTGTCCAGTTACX (SEQ ID NO:10)

AH 202: 5'-TCTGGATTGCATCGGGTTACX (SEQ ID NO:11)

AH 270: 5'- 6GTAACGACCTGTCGAGCATCCAGCT (SEQ ID NO:12)

AH 286: 5'-

AGCTGGATGCTCGACAGGTCAAGTAACAGGTTCGATCCGCGTTATATCGTTTACGGCATTACC  
CGTATAGCCGCTAGATGCCCCAACCATGACGGCCCATAGCTTGCGGCTTGC (SEQ ID  
NO:13)

AH 320: 5'-

AGCTGGATGCTCGACAGGTCAGGTCGATCCGCGTTACCAGGCCCATAGCTTGCGGCTTGCTG  
CAGTCGATGGACCATGCCTCTTGCCTGAACGTAGTCGTCCGATGCAATCCAGAGGTCG  
(SEQ ID NO:14)

AH 321: 5'-CAAGAGGCAT (SEQ ID NO:15)

AH 322: 5'-TCAGGCAAGAGGCATGGTCC (SEQ ID NO:16)

AH 342: 5'-TACTTGACCTGTCGAGCATCGTTACX (SEQ ID NO:17)

AH 343: 5'- 6GTAACCAGCTGCAAGCCGCAAGCTATGGGC (SEQ ID NO:18)

Please delete the paragraphs at page 85, lines 3-6 and add the following new paragraphs:

AH136: 5'-

AGCTGGATGCTCGACAGGTCTCTTGCCTGAACGTAGTCGTCCGATGCAATCCAGAGGTCG

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(SEQ ID NO:19)

AH 174: 5'-TACGTTTCAGGCAAGAGT6CCAGTTAC7 (SEQ ID NO:20)

AH 190: 5'- ZGTAACACCTGPTGACCTGTCTGAGCATC (SEQ ID NO:21 up to the P and SEQ ID NO:39 after the P)

Please amend following paragraph beginning at page 86, line 22 as follows:

5 nmoles of three carboxylic acid modified building block oligos [AH 155; 5'CTG GTA ACG CGG ATC GAC CTG TTA CT-COOH 3', SEQ ID NO:22; AH 272 5'ACG ACT ACG TTC AGG CAA GAG TTA CT-COOH 3', SEQ ID NO:23; and AH 202 5'-TCT GGA TTG CAT CGG CTG TTA CT-COOH 3', SEQ ID NO:24] (all oligonucleotides described ordered from DNA technology, Aarhus, Denmark) one from each of the three positions corresponding to the template were loaded with  $\beta$ -Alanine methyl ester coupled to allylglycine n-Boc followed by Boc deprotection ( $\beta$ -AlaOMe AG). The loading was done by incubating each of the oligos with 10 mM  $\beta$ -AlaOMe AG, 75 mM DMT-MM in 150 mM Hepes-OH buffer, pH 7,5 to a final volume of 50  $\mu$ l at 25°C shaking overnight. Then adding 5  $\mu$ l 1 M  $\text{NH}_4$ -acetate, incubated at 25°C for 10 min, then spin column purified with ddH<sub>2</sub>O equilibrated columns (Micro Bio-Spin chromatography columns P-6, Bio-Rad). The deprotection of the methyl group protected acid was done by adding 0,5  $\mu$ l 2M NaOH to the oligos and incubating for 10 min at 80°C. Lastly the oligos were spin column purified and loadings confirmed by mass spectrophotometry.

Please amend the paragraph beginning at page 87, line 11 as follows:

In order to be able to analyze the functional entity transfers using acrylamide gel analysis, the scaffold oligo [MDL251 5'amino-C6 dT-ACC TGT CGA GCA TCC AGC T 3', SEQ ID NO:25] was

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radioactively labelled in the 3' end. 50 pmol of the oligo was labelled with 10 µl ddATP αP32 (Amersham Biosciences) by adding 4 µl 10X NEbuffer 4, 4µl 10X CoCl<sub>2</sub> and 35 units of terminal deoxynucleotide transferase (New England Biolabs) and water to a final volume of 40 µl. Mixture incubated at 37°C for 1 hour. Labeled oligo purified using ddH<sub>2</sub>O equilibrated spin column.

Please amend the paragraph beginning at page 87, line 21 as follows:

12,5 pmol of the labeled scaffold oligo, 125 pmol loaded building block oligo AH 202, corresponding to position three on the template and 62,5 pmol template [AH 154 5' AGC TGG ATG CTC GAC AGG TCA AGT AAC AGG TCG ATC CGC GTT ACC AGT CTT GCC TGA ACG TAG TCG TCC GAT GCA ATC CAG AGG TCG 3' as follows, SEQ ID NO:26] was incubated in a final volume of 45 µl containing 20 mM Hepes-OH pH 7,5, 200 mM NaCl buffer. The oligos were annealed by heating to 80°C and slowly going down to 20°C (1°/min) using a thermocycler (Eppendorf, Mastergradient) Following the annealing 5 µl 0,5M DMT-MM was added. Sample crosslinked, see figure 32 overnight cycling at 10°C 10 sec/35°C 1 sec.

Please amend the paragraph beginning at page 89, line 4 as follows:

To create the Feuston 5 ligand aspartate is also needed. Therefore aspartate which was loaded as a pentenoyl (amine) and methyl (carboxylic acid) protected functional entity see Figure 31, to an amino modified scaffold oligo [AH 270 ;5' amino-GTA ACG ACC TGT CGA GCA TCC AGC T 3', SEQ ID NO:27]. The loading was done by mixing 25 µl 150 mM EDC (N-(3-

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Dimethylaminopropyl)-N'-ethylcarbodiimide hydrochloride, Fluka), 25  $\mu$ l NHS (N-hydroxysuccinimide, Sigma) and 5  $\mu$ l 100 mM of the pentenoyl protected aspartate functional entity, all reagents were dissolved in N,N-dimethylformamide, DMF. Incubated at 25°C for 40 min. To this mixture 5 nmol of the scaffold oligo, AH 270 resuspended in 30  $\mu$ l 150 mM Hepes-OH pH 7,5 was added and this incubated shaking over night at 25°C. The amine pentenoyl protection group was deprotected by adding 20  $\mu$ l 25 mM I2 dissolved in 1:1 tetrahydrofuran: water and incubated at 37°C for 2 hours. Followed by spin column purification, and loading confirmed by mass spectrum analysis.

Please amend the paragraph beginning at page 89, line 22 as follows:

The transfers were done in the same manner as described above, but using larger amounts of oligo to ensure there being enough ligand created to give a sufficient signal in the ELISA. For the first round the following amounts were used: 850 pmol loaded scaffold oligo; AH 270, 7500 pmol loaded building block oligo; AH 272 and 3250 pmol template oligo AH 140 [ 5' AGC TGG ATG CTC GAC AGG TCA GGT CGA TCC GCG TTA CCA GTC TTG CCT GAA CGT AGT CGT CCG ATG CAA TCC AGA GGT CG 3', SEQ ID NO:28]. The second round, adding 7500 pmol loaded building block oligo AH 155 for a transfer.